



Statement of Qualifications for City of Albany Consultants of Record Engineering and Related Services

**Environmental Permitting, Analysis, and Design
COR-09-B
(Cultural Resources Investigations)**

1 INTRODUCTION TO APPLIED EARTHWORKS, INC.

1.1 Firm Overview

In business since 1995, Applied EarthWorks is an employee-owned, self-capitalized cultural resources management firm recognized as an industry leader amongst its peers. The company provides a results-oriented team of skilled professionals specialized in archaeology, cultural resources management, and related disciplines. The firm has successfully completed all phases of cultural resources studies for small- and large-scale projects on behalf of cities, counties, public utilities, construction and engineering firms, developers, and state and federal agencies. By providing services that promote project advancement, Applied EarthWorks has facilitated reservoir and water pipeline construction, transportation improvements, updated communications systems, community development and infrastructure upgrades, urban redevelopment, environmental remediation, and improved energy generation and transmission.

A thorough understanding of federal and state regulatory requirements and compliance procedures guides Applied EarthWorks' in developing the most effective and economical cultural resources management procedures for every stage of a project. The company maintains excellent working relationships with state offices of historic preservation, various land-management agencies, and Native American organizations. These relationships enable Applied EarthWorks to offer comprehensive consultation that allows clients to make informed decisions about the treatment of cultural resources.

Applied EarthWorks strives to offer the broadest possible range of services within its fields of expertise, including:

- ▶ Archaeology (prehistoric and historical)
- ▶ Architectural History
- ▶ National Register Evaluations

- ▶ Findings of Effects
- ▶ State and Federal Permits and Compliance Documentation
- ▶ Native American Consultation
- ▶ Cultural Resource Overviews and Treatment Plans
- ▶ Coordination with Construction Management
- ▶ Monitoring and Emergency Archaeology
- ▶ HABS/HAER Documentation
- ▶ Lithic and Faunal Analysis
- ▶ Geomorphology and Geoarchaeology
- ▶ Interpretive and Educational Programs

Applied EarthWorks' project managers, archaeologists, and other cultural resources management specialists have a solid reputation for providing outstanding consultation. However, technical expertise alone does not sustain a business. Administrative personnel, support staff, and appropriate financial systems are also essential. The firm employs trained, experienced business management and financial professionals who maintain and generate timely, accurate financial information. Applied EarthWorks' fiscal integrity and sound relationships with financial institutions, insurance companies, and the legal sector provide a solid foundation for efficient contract administration.

1.2 Primary and Supporting Offices

Applied EarthWorks operates six regional offices: one in Oregon (Business ID # 0875642-9), one in Idaho, and four in California. The Principal Investigator/Project Manager for the Northwest Division—which will be the primary office for City of Albany projects—is based in Albany, Oregon. Field staff will be mobilized from this office as well. Lithic and faunal analysis will be completed by Applied EarthWorks' specialists in Coeur d'Alene, Idaho. Staff in the firm's corporate headquarters in Fresno, California, furnish centralized accounting, personnel, and payroll services for the company as well as specialized graphics and document production support.

Applied EarthWorks' facilities are designed to provide a wide range of cultural resources management services. Each office maintains a complete line of field equipment for survey, excavation, and photo documentation as well as an extensive resource library. Integrated computer hardware and software promotes accurate data analysis, high-quality graphics and document preparation, and effective interoffice communication. Laboratory facilities furnish space and equipment for technical analyses and are equipped to allow temporary curation of project materials. Long-standing associations with universities, museums, and Native American cultural centers permit arrangements for appropriate curation of archaeological collections and data.

1.3 Staff Summary

Applied EarthWorks has assembled a well-respected team of professionals who are as highly regarded for their communication skills as for their technical expertise. Current staff members include 35 full-time employees in the six regional offices. Our staff includes specialists in the history, prehistory, and archaeology of the Pacific Northwest, Great Basin, and California as well as the American Southwest and Rocky Mountain areas. Applied EarthWorks employs individuals proficient in a wide range of related disciplines. Project managers and field supervisors offer decades of experience managing cultural resources in both the public and private sectors. Through continuing education, membership in associated professional organizations, and on-the-job experience, Applied EarthWorks staff maintains a thorough understanding of the regulatory environment and compliance issues.

2 PREVIOUS RELEVANT PROJECT WORK IN THE ALBANY VICINITY

Selected projects in the Albany area are summarized in this section. In addition, Applied EarthWorks completed a number of cultural resources projects for the City of Albany. Those are summarized below, in Section 4.

2.1 Oregon State University College Forests

Under a multi-year indefinite-quantity contract with the Oregon State University College Forests, since 2005 Applied EarthWorks has completed archaeological surveys in support of numerous timber sales, post-harvest evaluations, trail maintenance projects, and other improvements and repairs in the McDonald-Dunn Research Forest near Corvallis in northeastern Benton County. We continue to hold this contract (we were re-selected under an open procurement in 2008) and to date have completed—or are in the process of completing—12 cultural resources studies on the McDonald-Dunn Research Forest.

During our tenure, Applied EarthWorks has surveyed ground-disturbing undertakings for archaeological resources; recorded sites associated with historical logging operations, historical homesteads, and prehistoric sites and isolated artifacts; and tested isolated artifacts to determine if they actually represented an archaeological site. In addition, Applied EarthWorks completed archaeological investigations at one prehistoric site in the forest following its inadvertent damage. After consultation with the Oregon State Historic Preservation Office (SHPO), Applied EarthWorks completed archaeological testing in June 2005 to evaluate the integrity and significance of the site in order to assist the College in determining the appropriate management and restoration measures. For each project, we completed background research and fieldwork, and prepared a report for the Oregon SHPO documenting the effort and the results. Every report we have prepared has been accepted by the SHPO, which has consistently agreed with our recommendations.

In addition to work on the McDonald-Dunn Research Forest, Applied EarthWorks has also assisted the Oregon State University College of Forestry with cultural resources studies in the Blodgett Tract in Columbia County, Oregon. Besides completing archaeological surveys for several timber sales and road realignments, in 2007 we assisted the College Forests with SHPO consultation by evaluating the effects that necessary road repairs would have on cultural

resources associated with historical railroad systems on the Blodgett Tract. Applied EarthWorks surveyed and evaluated the significance of the Columbia & Nehalem River Railroad main line (also known as the Kerry Main Line), the Noyes-Holland Railroad main line, branch and spurs lines, trestle remnants, a tunnel, a logging camp, a junction, and remnants of an abandoned landing with a log deck.

Throughout the course of this contract, Applied EarthWorks has worked closely with College Forests staff to ensure that their cultural resources are properly managed while still allowing for management of the forest (including timber harvesting). In every case, our reports have satisfied both the College and the SHPO.

Oregon State University College Forests
Debora Johnson, Forest Information Officer
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E-mail: debora.johnson@oregonstate.edu

Alternative contact (Ms. Johnson is leaving the College Forests in June 2009):
Dave Lysne, College Forests Director
Phone: (541) 737-3652
E-mail: dave.lysne@oregonstate.edu

2.2 Sweetwater West Subdivision

Conser Design and Construction proposed to develop an approximately 40-acre area as the Sweetwater West subdivision in Millersburg. Due to wetlands on the property, the proposed development required a permit from the U.S. Army Corps of Engineers which made an archaeological survey necessary. Because imported fill was readily apparent in a portion of the project area, Applied EarthWorks' investigations in May 2008 began with backhoe trenching to expose native soils below the fill. By examining the profiles within the trenches and the composition of the spoils, archaeologists were able to reconstruct the depositional history of the project area and accurately ascertain the potential for buried archaeological deposits. Once the backhoe had completed trenching, it was used to clear paths through a dense blackberry thicket to allow archaeologists to examine the surface. Without the assistance of the backhoe, a survey in the blackberry thicket would not have been possible. Archaeologists were able to finish examining the area with a traditional pedestrian survey. The varied topography of the project area challenged Applied EarthWorks to develop a strategy appropriate for the project. Use of mechanical trenching and clearing in combination with standard survey methods provided an efficient means of completely examining the project area. This comprehensive investigation demonstrated that it was unlikely that future development would affect cultural resources.

Applied EarthWorks' effort was completed on time and within budget. Our report was accepted without change by the client, the U.S. Army Corps of Engineers, and the SHPO.

Conser Design and Construction
Matthew J. Conser
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2.3 13th Avenue Subdivision

A development company intends to subdivide and develop a 15.26-acre parcel at the western edge of Albany. Approximately 46 new homes are anticipated in the subdivision, with associated infrastructure. Currently, the property is open space, and wetlands encompass nearly 40 percent of the parcel. Although only a small portion of the wetlands will be impacted during development, obtaining permits from the U.S. Army Corps of Engineers to develop the wetlands required an archaeological survey. Applied EarthWorks completed a pedestrian survey of the parcel surface in November 2007. Because imported fill covers most of the area to be developed, in January 2008 we instituted a subsurface survey using a backhoe to pothole the fill and expose the buried native soil. This type of investigation is an extremely effective method of exposing subsurface archaeological deposits prior to construction. Our work was completed on time and within budget. The client accepted the report without change; the U.S. Army Corps of Engineers and the SHPO have not yet reviewed the report.

1901 13th Avenue LLC

Byron Hendricks

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2.4 Brownsville Dam Removal

The Brownsville Dam in the Calapooia River in Linn County was a substantial impediment to upstream migration of anadromous fish. To improve fish habitat, removal of the dam was accomplished in September 2007 through a joint effort of the Calapooia Watershed Council, two federal agencies, two state agencies, Linn County, the City of Brownsville, and a private canal company. Dam removal required a permit from the U.S. Army Corps of Engineers, necessitating consultation with the Oregon SHPO.

Because the location has a high probability for archaeological resources, the Calapooia Watershed Council retained Applied EarthWorks in April 2007 to complete the archaeological survey requested by the SHPO. The effort included an examination of maps at the SHPO to determine whether previous archaeological surveys had been completed nearby and whether archaeological resources had previously been recorded in the vicinity; a field inspection to look for archaeological resources; and preparation of a report documenting the results. Applied EarthWorks concluded that the project had the potential to affect the previously recorded historic Brownsville Ditch, which is listed on the Linn County Register of Historic Resources and is considered a significant local property by the City of Brownsville. Applied EarthWorks recommended avoidance of the canal during work necessary for dam destruction or further evaluation if it could not be avoided. Our work was completed on time and within budget, and our report was accepted without change by the client and the SHPO.

Calapooia Watershed Council

Denise Hoffert-Hay, Project Manager

Phone: (541) 619-5896

Email: hofferthay@peak.org

2.5 53rd Avenue Residential Development

Applied EarthWorks investigated the archaeological sensitivity of a proposed residential neighborhood north of 53rd Avenue between Oak Creek and the Calapooia River in South Albany to assist PlanTek Management, Inc. in project planning. After a preliminary cultural resources survey in 1996 identified archaeological resources, Applied EarthWorks was retained to investigate four prehistoric sites to evaluate significance and guide the client through various federal, state, and local regulations to ensure compliance with all matters pertaining to cultural resources. Prior to excavation, our firm consulted with various local Native American organizations to develop acceptable treatment procedures for archaeological resources. We also coordinated with various government, community, and special interest groups involved in the project. To facilitate the avoidance of archaeological sites during construction, Applied EarthWorks worked closely with project engineers to ensure that the locations of archaeological resources were accurately depicted on maps of the project area. Our firm also adopted a flexible fieldwork schedule and was willing to adapt our efforts to accommodate changes in overall project timelines and requirements. Our study found that one site was significant and three were not; our report was accepted without change by the client, the U.S. Army Corps of Engineers, and the SHPO. Our work was completed on time and within budget.

2.6 Wetland Mitigation along South Fork Oak Creek

Applied EarthWorks assisted Oak Creek Park, LLC in conducting studies prior to undertaking a wetlands enhancement project that included grading, storing and removing spoils, lowering selected upland areas, and planting within approximately 20 acres along South Fork Oak Creek just south of 53rd Avenue in Albany. The restored wetland was incorporated into Teloh Calapooia Park administered by the City of Albany. Applied EarthWorks completed a records search at the Oregon SHPO in Salem and conducted an archaeological pedestrian surface reconnaissance in May 2001. Although no cultural resources were visible on the surface, Applied EarthWorks identified a natural knoll that had a high probability of containing archaeological materials. Applied EarthWorks familiarity with the patterns of prehistoric land use in the Willamette Valley, especially along watercourses, provided the developer with information necessary to avoid possible impacts to archaeological resources. Our report was completed on time and within budget, and was accepted without comment by the client and the SHPO.

3 PROJECT TEAM

3.1 Candidate Team Members

Clayton G. Lebow (M.A., RPA), Project Manager, Albany, Oregon

Mr. Lebow is Vice President of Applied Earthworks, responsible for the company's business in the Pacific Northwest. He is a Registered Professional Archaeologist (RPA) with more than 29 years experience in archaeology and cultural resources management. He has served as a Senior Archaeologist for Applied EarthWorks since 1995. Between 1994 and 1994 he was Northwest Division Manager/Senior Archaeologist for INFOTEC Research, Inc., with an office in Albany. Between 1984 and 1986 he owned Cascade Archaeological Research, also headquartered in Albany.

During his career Mr. Lebow has managed more than 300 cultural resources studies in Oregon and California. He has directed large-scale surveys, prepared and implemented historic properties treatment plans, managed archaeological testing and data recovery, and supervised the documentation, National Register evaluation, and assessment of potential effects at hundreds of archaeological sites. He has coordinated fieldwork, laboratory processing, technical analyses, and preparation of professional reports documenting archaeological studies performed under his supervision. Mr. Lebow's experience encompasses a wide variety of federal, state, community, and private projects.

Mr. Lebow has completed numerous cultural resources studies in and around Albany. He managed and was personally involved in all of the projects summarized above in Section 2. In addition, and under contract with the City of Albany, Mr. Lebow managed and directed cultural resources studies for the South Albany Water Line and the Calapooia Interceptor Sewer Replacement Project, as summarized below in Section 4. On behalf of the City, he developed and implemented a program for promoting interest in, and awareness of, prehistoric cultural resources for Albany's elementary schools.

Mr. Lebow has a long and close personal affiliation with the City of Albany. He was raised and continues to live in North Albany. He attended North Albany Elementary School, North Albany Middle School, and Albany Union High School before graduating from West Albany High School. He served two terms on the City of Albany Historic Landmarks Commission.

Douglas R. Harro (M.A., RPA), Lithic Analyst, Coeur d'Alene, Idaho

Mr. Harro has extensive experience interpreting the technological adaptations of prehistoric groups after analyzing more than 120 lithic assemblages from Oregon, Washington, Idaho, California, and New Mexico. As a lithics analyst for Applied EarthWorks since 1995, he has performed detailed technological and functional analyses of lithic artifacts recovered from sites throughout Oregon, California, and elsewhere in the western United States. The expertise Mr. Harro has acquired by studying a wide spectrum of prehistoric groups (from highly mobile hunter-gatherers to fully sedentary agriculturalists) has provided him with a solid research foundation. In addition to his lithic analysis skills, he has experience in experimental archaeology, raw material procurement and exchange, computerized spatial analysis, and GIS software operation.

Mr. Harro and Mr. Lebow have worked together on numerous projects since 1995, including many of those summarized above in Section 2. Mr. Harro served as Applied EarthWorks' lithic analyst for archaeological studies for the Oregon State University College Forests, the 53rd Avenue Residential Development (both summarized above in Section 2), and for the City of Albany's South Albany Water Line and Calapooia Interceptor Sewer Replacement projects (both summarized below in Section 4).

Rebecca L. McKim (M.A., RPA), Faunal Analyst, Coeur d'Alene, Idaho

An experienced zooarchaeologist, Ms. McKim has analyzed and interpreted faunal collections from diverse environmental regimes in Oregon, California, and the American Southwest. Her areas of expertise include hunter-gatherer and agricultural adaptations from desert, montane, and coastal environments. Since 1995, Ms. McKim has served as Applied EarthWorks' primary

faunal analyst and also provides extensive experience in archaeological database management. She has contributed to or served as primary author of numerous technical reports.

Ms. McKim and Mr. Lebow also have worked together on many projects since 1995, including projects in and around Albany summarized above. Ms. McKim analyzed the faunal remains for the Oregon State University College Forests, and for the City of Albany's South Albany Water Line and Calapooia Interceptor Sewer Replacement projects.

Ann M. Munns (M.A., RPA), Laboratory Supervisor, Lompoc, California

Ms. Munns has supervised laboratory processing and analysis of more than 100 archaeological collections during her 10-year tenure with Applied EarthWorks. She has worked closely with the rest of the proposed project team in preparation of technical reports documenting testing and data recovery efforts. As laboratory manager, Ms. Munns directs technicians during sorting and identification of artifacts, distributes materials to technical analysts, integrates their findings into the project database, and oversees preparation of collections for curation. She is also an experienced analyst, specializing in faunal shell and beads/ornaments of shell, stone, and bone. In addition to her laboratory experience, Ms. Munns has directed field surveys, prehistoric and historic site recordation, archaeological monitoring, and data recovery excavations. Ms. Munns and Mr. Lebow have worked together on numerous projects since Ms. Munns joined Applied EarthWorks.

3.2 Team Experience

All of Applied EarthWorks' archaeological investigations and cultural resources consultation efforts in Oregon have been managed by Senior Archaeologist Clayton Lebow. The project team has worked together on hundreds of projects, including several in Oregon summarized above in Section 2 and below in Section 4. Lebow worked closely with lithic analyst Douglas Harro to examine and interpret the results of investigations at four prehistoric sites for the 53rd Avenue Residential Development in Albany. With Ms. McKim, they also collaborated to prepare the report following excavation at prehistoric site 35 BE 34 for Oregon State University College Forests. The efforts of Lebow and Harro were supplemented by contributions from Rebecca McKim and Ann Munns to report the results of the archaeological investigations for the South Albany Water Line and the Calapooia Interceptor Replacement Project for the City of Albany.

3.3 Other Team Attributes

The team's long history of collaboration provides these authors and analysts a common frame of reference when examining archaeological collections. This in turn gives them the opportunity for more meaningful interpretations of the chronology, content, and function of archaeological sites, individually and within a larger settlement system. In addition, their work together on a large number and wide variety of investigations has allowed them to streamline their methods and communication processes, allowing for a more efficient system analysis of reporting.

4 TRACK RECORD WITH THE CITY OF ALBANY

4.1 South Albany Water Line (2005–2006)

In 2005 the City of Albany’s Public Works Department retained Applied EarthWorks to help determine whether significant archaeological sites would be adversely affected by installation of the South Albany Water Line. Because the proximity of the water line to two of the sites was unclear based on previous investigations, Applied EarthWorks implemented an absence/presence testing program—essentially a subsurface survey—along the water line route to determine whether the route crossed either site. In addition, given the high density of archaeological sites in the area, Applied EarthWorks continued the testing program in areas not adjacent to known sites.

The subsurface survey confirmed that one of the sites did not extend into the water line corridor and would not be affected. However, prior to testing, flooding exposed archaeological materials extending from 35 LIN 554, which had previously been determined eligible for the National Register of Historic Places, into the water line corridor. In addition, excavations along the water line corridor found evidence of previously unknown archaeological site 35 LIN 555. At the City’s request, in 2006 Applied EarthWorks tested 35 LIN 554 to assess whether installation of the City’s water line would adversely affect that site’s significant qualities. 35 LIN 555 was tested to evaluate its significance and, if found to be significant, to assess potential adverse effects from water line installation.

Applied EarthWorks examined the data recovered during testing along with the results of previous investigations and prepared a technical report that defined the nature and spatial relationship of the sites. We determined that the significant qualities of 35 LIN554 would not be adversely affected by installation of the water line. We also evaluated 35 LIN 555 as significant (i.e., eligible for the National Register of Historic Places) and found that the water line route as planned would adversely affect the site. In consultation with the City’s project manager, a new alignment was sampled and found to avoid any adverse effects to the site.

Our work on this project was completed on time and within budget. The City, the U.S. Army Corps of Engineers, and the SHPO accepted our findings of effects and the water line was successfully installed.

City of Albany’s Project Manager:

Chris Cerklewski

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4.2 Calapooia Interceptor Replacement Project (2007–2008)

Replacement of a City sewer line across freshwater wetland near the Calapooia River in West Albany required a permit from the U.S. Army Corps of Engineers. Consequently, the project also required compliance with Section 106 of the National Historic Preservation Act of 1966 (as amended). The Oregon SHPO requested an archaeological survey because the location has a high probability for archaeological resources. In 2007, the City retained Applied EarthWorks to complete the survey. Two archaeological sites were identified toward the southern end of the sewer line corridor.

Because it was infeasible to avoid the sites, the City asked Applied EarthWorks to evaluate their significance (i.e., eligibility for the National Register of Historic Places) and, if significant, to assess the adverse effects of replacing the sewer line. Fieldwork began in November 2007, but it soon became apparent that the two sites were actually one large site (designated 35 LIN 734/735) that extended into the residential neighborhood where lateral lines were anticipated. After obtaining additional permits, Applied EarthWorks continued investigations in April 2008. Due to the difficulty of defining the site boundary and evaluating the site's significance within the residential neighborhood, 35 LIN 734/735 was assumed to be eligible for the National Register and fieldwork proceeded with the goal of collecting data to assess potential adverse project effects.

These excavations yielded chronometric data that allowed the site occupation to be dated, while interpretation of the lithic material at the site shed new light on Late Archaic settlement in the lower Calapooia River area. However, Applied EarthWorks was also able to determine that integrity within the project corridor was impaired and construction would not affect the site's significant qualities. The City, the U.S. Army Corps of Engineers, and the SHPO concurred with Applied EarthWorks' findings and a permit was issued for construction to begin this coming summer. Our work was completed within budget.

City of Albany's Project Manager:

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4.3 Mock Archaeological Excavation for Grade School Students (1997–2000)

In a joint venture with the City of Albany, and partially funded by a grant awarded to the City, Applied EarthWorks' Senior Archaeologist Clayton Lebow developed a hands-on program to teach Albany grade school students about the study of cultural resources. The activity, which was instituted in 1997 and repeated in 1998, 1999, and 2000, gave local fifth graders the opportunity to excavate a mock archaeological site and sift the soils to discover artifacts. Instructors used the opportunity to demonstrate how archaeologists collect and document information about the Native Americans who inhabited the area for thousands of years before Europeans arrived in the Willamette Valley.

APPENDIX A

Résumés



CLAYTON G. LEBOW, RPA

Applied EarthWorks, Inc., Albany, Oregon
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Expertise

Cultural resources management, project management, Native American coordination and consultation, developing scopes of work and cost estimates. Extensive knowledge of prehistory; hunter gatherer land-use systems, archaeological field methods, site formation processes, and site stabilization techniques. Specialized training in preparing agreement documents under Section 106 of the NHPA and federal project and historic preservation law; Register of Professional Archaeologists certified.

Education

M.A. (1982), Archaeology, Cultural Anthropology, Geography: Oregon State University.
B.S. (1977), Forest Engineering: Oregon State University.

Professional Experience

- 2000– Vice President/Senior Archaeologist, Applied EarthWorks, Inc., Albany, Oregon, and Lompoc, California.
- 1995–2000 Division Manager/Senior Archaeologist, Applied EarthWorks, Inc., Albany, Oregon, and Lompoc, California.
- 1986–1995 Northwest Division Manager/Senior Archaeologist (1994–1995); Senior Archaeologist/ Ass't. Branch Manager (1991–1993); Senior Archaeologist/ Assoc. Branch Manager (1990); Ass't. Program Manager (1989); Staff Archaeologist (1986–1988), INFOTEC Research, Inc., Albany and Eugene, Oregon.
- 1986–1987 Staff Archaeologist, Argonne National Laboratory, Portland, Oregon.
- 1984–1986 Owner and Principal Investigator, Cascade Archaeological Research, Albany, Oregon.
- 1979–1984 Various positions (ranging from Project Director to Field Technician), Oregon State University, Department of Anthropology, Corvallis, Oregon.
- 1981 Cultural Resource Technician, Rogue River National Forest, Applegate, Oregon.
- 1980 Intern, Oregon State Historic Preservation Office, Salem, Oregon.

Technical Qualifications

Mr. Lebow has participated in more than 300 archaeological investigations throughout the western United States during his 29-year career. He has served in a supervisory capacity for more than 265 projects and as a principal investigator for more than 225 projects. During his career he has completed all phases of archaeological investigations, including environmental assessments and impact statements; archaeological and Native American monitoring; surveys to identify and document archaeological sites; inspections to assess site condition; geoarchaeological studies to assess project impacts; subsurface probing to identify absence/presence and determine site boundaries; excavations to evaluate National Register eligibility, assess effects, and mitigate adverse effects; and stabilization at sites that were eroding from natural causes. Mr. Lebow has written more than 200 professional reports or publications documenting cultural resources studies. Among those are cultural resources management plans for federal agencies, including an overview/management plan for the Prineville District of the BLM, and Volume 5 (*Management of Prehistoric Resources*) of the 14-volume Vandenberg Air Force Base Integrated Cultural Resources Management Plan.



CLAYTON G. LEBOW

PROJECTS AND REPORTS FOR THE CITY OF ALBANY

Project Manager and Principal Investigator

Applied EarthWorks' excavations to evaluate the significance of a prehistoric archaeological site for the City of Albany's Calapooia Interceptor Sewer Replacement. Prepared a scope of work and cost estimate for the City; negotiated a contract; applied for an archaeological permit from the SHPO; coordinated with Native Americans; directed fieldwork, laboratory sorting, technical analyses, and curation preparation; prepared a report documenting the effort, evaluating significance, assessing adverse effects, and offering management recommendations; helped guide the City through the cultural resources regulatory process.

Reports

Lebow, Clayton G., Douglas R. Harro, and George B. Wisner

2008 *Archaeological Investigations at 35 LIN 734/735 for the Calapooia Interceptor Replacement Project New Sewer Main in Albany, Linn County, Oregon.* Applied EarthWorks, Inc., Albany, Oregon. Submitted to the City of Albany Public Works Department, Albany, Oregon.

Wisner, George B., and Clayton G. Lebow

2007 *Archaeological Survey for Calapooia Interceptor Replacement Project SS-07-01, New Sewer Main in Albany, Linn County, Oregon.* Applied EarthWorks, Inc., Albany, Oregon. Submitted to City of Albany Public Works Department, Albany, Oregon.

Project Manager and Principal Investigator

Applied EarthWorks' excavations to investigate archaeological sensitivity, evaluate site significance, and assess adverse effects for the City of Albany's South Albany Water Line. Prepared a scope of work and cost estimate for the City; negotiated a contract; applied for an archaeological permit from the SHPO; coordinated with Native Americans; directed fieldwork, laboratory sorting, technical analyses, and curation preparation; prepared a report documenting the effort, evaluating significance, assessing adverse effects, and offering management recommendations; helped guide the City through the cultural resources regulatory process.

Reports

Lebow, Clayton G., and Douglas R. Harro

2007 *Archaeological Investigations at 35 LIN 554 and 35 LIN 555 for the South Albany Waterline, Linn County, Oregon.* Applied EarthWorks, Inc., Albany, Oregon. Submitted to the City of Albany Public Works Department, Albany, Oregon.

Lebow, Clayton G.

2006 *Absence/Presence Testing for Archaeological Resources, South Albany Water Line, Linn County, Oregon.* Applied EarthWorks, Inc., Albany, Oregon. Submitted to the City of Albany Public Works Department, Albany, Oregon.



DOUGLAS R. HARRO, RPA

Applied EarthWorks, Inc., Coeur d'Alene, Idaho
(208) 667-1440 • dharro@appliedearthworks.com

Expertise

Prehistory of the central California coast, Columbia Plateau, and Desert Southwest; lithic technology; petrology; geographic information systems; experimental archaeology.

Education

- M.A. Anthropology, Washington State University, 1997.
- B.A. Anthropology, Washington State University, 1989.
- B.A. Humanities, Washington State University, 1988.

Professional Experience

- 1995– Lithic Analyst/Field Supervisor, Applied EarthWorks, Inc., Lompoc, California.
- 1994–1995 Lithic Analyst, INFOTEC Research, Inc., Buellton, California.
- 1994 Field Archaeologist, INFOTEC Research, Inc., Buellton, California.
- 1993–1994 Lithic Analyst, INFOTEC Research, Inc., Eugene, Oregon.
- 1990–1992 Field Archaeologist (1992), Stone Artifact Analyst (1990B1992), Teaching Assistant (1990), Washington State University, Pullman.
- 1989 Field Archaeologist, Alpine Archaeological Consultants, Montrose, Colorado.

Technical Qualifications

Douglas Harro has extensive experience interpreting the technological adaptations of prehistoric groups after analyzing more than 150 lithic assemblages from Oregon, Washington, Idaho, California, and New Mexico. He has written and published reports from both academic and cultural resources management projects. Field experience includes archaeological survey and excavation in California, the American Southwest, and the High Plains of the Dakotas. His current research focuses on the patterns of lithic raw material procurement and exchange, for which he won the Don Crabtree Scholarship for Lithic Technology. The experience accumulated through the study of a wide spectrum of prehistoric groups from highly mobile hunter-gatherers to fully sedentary agriculturalists has provided Mr. Harro with a solid foundation upon which to base his research in lithic technology, and more specifically, his present work analyzing the assemblages left by the complex hunter-gatherers of the western United States.

Mr. Harro specializes in stone artifact analysis. He has examined and interpreted many lithic assemblages from various parts of Oregon as well as California's central and south coasts. Specifically, his interests center on understanding how stone tool technologies were adapted by prehistoric groups to meet changing conditions. In addition, Mr. Harro has directed archaeological excavations at several sites on and is familiar with the requirements and procedures specific to compliance with Section 106 of the National Historic Preservation Act. He is also knowledgeable of issues frequently raised by Native American groups and is experienced at effectively alleviating those concerns.



REBECCA L. MCKIM, RPA

Applied EarthWorks, Inc., Coeur d'Alene, Idaho
(208) 667-1440 • rmckim@appliedearthworks.com

Expertise

Prehistory of California and the southwestern United States, zooarchaeology, prehistoric economics, paleoecology, laboratory processing.

Education

M.A. Archaeology, University of Arizona, 1994.

B.A. Anthropology and Archaeology, Washington University, St. Louis, 1991.

Professional Experience

1995– Staff Archaeologist and Faunal Analyst, Applied EarthWorks, Inc., Lompoc, California.

1994–1995 Lead Field Technician and Faunal Analyst, INFOTEC Research, Inc., Buellton, California.

1993–1994 Faunal Analyst, Homol'ovi Archaeological Research Program, Tucson.

1992–1994 Teaching/Research Assistant, University of Arizona, Tucson.

1991 Teaching Assistant, Washington University, St. Louis.

Technical Qualifications

Rebecca McKim has analyzed and interpreted faunal collections from a variety of regions and environmental regimes from the American Southwest and California. She has studied hunter-gatherer and agricultural adaptations from desert, montane, and coastal environments. This experience provides Ms. McKim with the background to pursue her research interests, centering around the relationship between subsistence and environmental change. In addition to her analytic specialization, Ms. McKim has had extensive fieldwork and laboratory experience throughout the West and Midwest, including the states of Washington, Oregon, California, Arizona, New Mexico, North Dakota, and Missouri. She has led crews on survey, testing, and data recovery phases of excavation, and has written and published reports for both academic and cultural resources management projects.



ANN MUNNS, RPA

Applied EarthWorks, Inc., Lompoc, California
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Expertise

Survey, testing, and data recovery at prehistoric and historic sites; laboratory methods and management; bead and ornament analysis; background research; preparation of cultural resources management plans; report coordination, preparation, and editing; curation preparation and collections management.

Education

M.A. Archaeology, Department of Anthropology, University of California, Santa Barbara, 1992.

B.A. Anthropology and Biology, University of Northern Iowa, Cedar Falls, 1986.

Professional Experience

- 1999– Senior Archaeologist/Laboratory Director (2005–), Laboratory Director/Associate Archaeologist (2002–2005), Staff Archaeologist (1999–2002), Applied EarthWorks, Inc., Lompoc, California.
- 2000 Senior Archaeologist/Principal Investigator, Chambers Group, Inc., Irvine California.
- 1999 Archaeological Monitor, Science Applications International Corporation (SAIC), Santa Barbara, California.
- 1995–1997 Project Laboratory Director and Instructor, University of California, Santa Barbara, Department of Anthropology.
- 1993–1999 Bead Analyst, Ann M. Munns Archaeological Consulting.
- 1990–1997 Co-Instructor/Teaching Associate/Teaching Assistant, University of California, Los Angeles, Department of Anthropology/Summer Sessions.
- 1989–1991 Staff Archaeologist/Crew Chief, Dames & Moore, Goleta, California.
- 1989–1991 Assistant Coordinator, Central Coast Information Center, University of California, Santa Barbara, Department of Anthropology.
- 1987 Field Technician, Tetra Tech, Inc.

Technical Qualifications

During her 20-year career, Ms. Munns has conducted or supervised more than 50 investigations. She has participated in and directed the full range of phases and tasks, including survey, testing and data recovery excavations, laboratory processing, specialist analysis, database management, collection curation preparation, construction monitoring, and report preparation and editing. She has served as principal or co-principal investigator for several Section 106 data recovery projects in central California. She directed additional data recovery investigations as part of her graduate research, focused on shell bead production on the northern Channel Islands.

As director of Applied EarthWorks' Lompoc laboratory, Ms. Munns has managed and carried out collections processing, specialist analyses, and curation preparation for more than a dozen projects, including several that encompass large volumes of diverse sample materials, several of which involved multiple project phases. In addition, Ms. Munns has conducted extensive research on the production of shell beads, ornaments, and fish hooks in Santa Barbara and Ventura counties and has published several articles, reports, and papers presenting the results of her research. Ms. Munns has completed the Advisory Council on Historic Preservation Section 106 training course and is certified in Hazardous Waste Operations and Emergency Response (HAZWOPER).

APPENDIX B

Labor and Fee Schedules

City of Albany
 Consultants of Record
 Environmental Permitting, Analysis, and Design
 COR-09-B (Cultural Resources)

Applied EarthWorks, Inc.
FY 2009/10 Schedule of Labor Rates by Labor Category (through June 30, 2010)

AE Labor Category	Project Specific Position	Hourly Rate
Executive VIII (003)	Project Manager	132.5
Manager III (014)	Principal Investigator II	92.25
Manager II (015)	Principal Investigator I	86.01
Manager I (016)	Senior Archaeologist	77.27
Supervisor VIII (024)	Field Supervisor IV	72.8
Supervisor VII (025)	Field Supervisor III	70.62
Supervisor VI (026)	Field Supervisor II	67.91
Supervisor V (027)	Field Supervisor I	66.14
Supervisor IV (028)	Field Supervisor	63.65
Supervisor III (029)	Crew/Field Supervisor	61.15
Supervisor VI (026)	Laboratory Director	67.91
Supervisor II (030)	Crew Chief	55.95
Technical Specialist VII (025)	Faunal/Botanical/Lithic/Geomorphological Analyst I	70.62
Field Technician VII (035)	Crew Chief	53.25
Field Technician VI (036)	Lead Field Technician	50.75
Field Technician V (037)	Field Technician	48.26
Laboratory Technician (036)	Laboratory Technician	50.75
Editor IX (059)	Publications Manager	76.34
Editor IV (064)	Draftsperson	56.16
Administrative Staff IX (050)	Project Accountant	72.8
Administrative Staff VII (052)	Project Administrator	66.66
Secretarial/Clerical VI (073)	Administrative Assistant	37.34

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Applied EarthWorks, Inc.
FY 2009/10 Schedule of Consultant Fees (through June 30, 2010)

Description	Unit	Cost
Travel Expenses:		
A. Rental Vehicle	Day	Actual
B. Personal Vehicle (IRS rate)	Mile	\$0.55
C. Parking/Tolls	EA	Actual
D. Lodging/Meals	EA	Actual
Miscellaneous Supplies/Equipment		
A. Supplies/Expendable Equipment: Film, Film Developing, binders, Report Covers, Computer Disks, Maps, Postage, Curation supplies, Field and Lab supplies, Field forms, Safety Equipment/clothing.	EA	Actual
B. Trimble GPS unit (in-house)	Day	\$90
C. Dewatering Equipment and Water screening Supplies: hoses, water screening hardware, water pump, hardware mesh, etc.	EA	Actual
D. Portable Storage/Trailer	EA	Actual
E. Portable Lavatory	EA	Actual
F. Archaeological Records Searches	EA	Actual
G. Archaeological Curation Fees	EA	Actual
Analysts, subcontractors, and special studies:		
A. Geomorphologist	Hour	\$68
B. Backhoe Operator	Hour	\$100
C. Botanical Studies	EA	\$180
D. Obsidian Studies	EA	\$70
E. C14 Analysis	EA	\$595
Printing and Reproductions		
A. Copying/Printing (Outside Vendor)	EA	Actual
B. Oversize Plots (in-house)	Sq. Ft.	\$5.00
C. Reprographics (in-house)		
Single Side	EA	\$0.08
Double Sided	EA	\$0.11
11 x 17	EA	\$0.27
Standard and Overnight Mail Services	EA	Actual